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Some Seasonal Citrus Pointers

BY R. E. NORRIS
LAKE COUNTY AGRICULTURAL
AGENT

With the coming of the fall months activities commence anew in the citrus grove. Fertilization, cultivation, irrigation, picking, banking the young trees, setting wood for fires that we hope won't have to be lighted, and the many other routine activities in the grove all must be looked after.

One of the early fall activities is the fertilization of the young, non-bearing trees and usually a complete fertilizer is used for this application. Generally the young tree rows are run over with an acme or other cultivating device and the trees "laid-by" until spring except for the banking operations that must be carried out just before cold weather arrives.

Most of us figure on getting our fire guards plowed sometime between the first and middle of September. The main reason for doing it this early — before there is actually a fire hazard within the grove — is simply to get the job out of the way so that it won't have to be done later when there are more jobs to be done than time to do them.

October and November are the favored months among most growers for applying the fall application of fertilizer in their groves. In Lake County we stress the production of any and all kinds of cover crops in our demonstration groves during the summer months, so that we will have all the organic matter possible in the

soil at the time fertilizers are applied. We feel that the two most vital factors in an efficient fertilizer program are the presence of an ample supply of organic matter and a soil acidity of about pH 6.0. Organic matter decomposes to form humus in the soil. Humus acts like a sponge and literally "soaks up" plant nutrients and that is why we like to have all of the organic matter possible in the grove. It is too late now to grow a cover crop in the grove for this Fall. If you have an old canopied grove where a cover crop will not grow or if, for some reason your cover crop did not grow, then it might pay you to mow some natal grass fields and haul the hay into the grove. You can get credit for this on the Soil Conservation program and the practice is certainly worth while. Now, assuming that we have, or will have, a good supply of organic matter in the grove the next thing to do is to check that pH. Do you know that when the pH of the grove soil is 6.0 that it has the capacity to hold in an available form over three times as much of the plant food bases (such as calcium, magnesium, potassium, zinc, manganese, etc.) as it will when the pH is 4.5. That is important. That is soil conservation and cost conservation both to have the pH near where it should be. The recommendation of the Agricultural Extension Service is for a grower who has a grove soil with a

pH of 4.5 to 6.0 to apply from 1500 to 700 pounds of dolomite per acre respectively. And we recommend dolomite because it contains both calcium and magnesium. The familiar bronze-colored leaves on citrus trees, which are easily seen, particularly on seedy varieties of grapefruit that have a heavy crop on them, is caused by a lack of magnesium. So, when we put on a liming material to raise the pH we may as well put on one that will help us with our bronzing problem, too. Dolomite will do this.

Other materials such as ground limestone, basic slag, rock and colloidal phosphate, bone meal and some others will also raise the pH when applied to the soil and these materials are suggested for use when conditions in the grove are such as require any one of them in working out some particular problem.

When the pH is about right and there is a good supply of organic matter in the grove, two important factors have been considered in the fertilizer program.

In Lake County demonstration groves we normally apply our fall fertilizer in October and November. We feel that the fall application is the most important of the three annual applications because on this application depends largely the amount of bloom the grove will have next year. And it is on this application

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THE OBSERVER COMMENTS--

We are not particularly superstitious but we have, from time to time, taken considerable significance from signs.

And speaking of signs, we have seldom if ever seen the signs pointing more favorably toward the development of better citrus crops in Florida than is the case right now.

One of the most portentous indications of what we mean is shown by the rapidly increasing interest with which the citrus growers of the state are taking in the recommendations of their citrus Experiment Station and those of the Federal Department of Agriculture.

The very evident realization by the vast majority of growers of the tremendous value of these agencies and others of kindred character is reflected in the newspaper reports from over the state which tell of the numerous grower meetings which seek and secure the services of Dr. Camp and other authorities as speakers at their gatherings. There have been several instances during the past few weeks when groups of growers have travelled from one county to another to hear such addresses.

The true value placed upon the Experiment Station recommendations is definitely reflected by this intense grower interest. Even more positive evidence of this interest is shown by the large groups of citrus growers who come from every county in the citrus belt to visit the Experiment Station at Lake Alfred to learn first hand of the good work which is being carried on there in the interest of Florida's citrus growers.

More personal visitations are being made to the Station now than ever before in its history—proof of the interest and confidence in which growers hold this institution.

Another "sign" which appeals most favorably to us and we are certain to the vast majority of citrus growers in the state, is that despite marked increases in costs of imported fertilizer ingredients fertilizer manufacturers generally over the state have voluntarily booked the growers' fertilizer requirements for

the present season's demands on the basis of pre-war prices.

Strikes us that no one thing could more plainly indicate the attitude of the manufacturers toward their grower customers, since it would have been entirely in line with general merchandising practices in most lines to have increased their prices to a point where the increased cost of replacing materials used would have been taken care of.

Back in our early school days we remember that the teacher used to hand out a nice silver star to the boys and girls who had been especially good or especially proficient. We tender herewith one nice big silver star to the fertilizer boys for their behavior as above noted.

We have noted numerous instances the past month where growers who were obliged to "skimp" their applications the past season or two, are now very shrewdly taking advantage of the present price situation to give their groves all the complete fertilizer needed including the making up of plant food shortages which resulted from unfavorable conditions last year.

Old timers who remember the effect of the last world war on potash supplies will realize how fortunate they are now in this respect. With domestic potash supplies developed since the last war, coupled with the reported possibility of some potash continuing to come to this country from France and Spain, the outlook is that any noticeable shortage of potash is very unlikely.

It might be that within the next year or two some growers who have a preference for sulphate of potash over other forms may temporarily be obliged to use muriate, but even this may not be necessary. Even with the supply apparently adequate, however, the price will eventually be affected if the war continues over any long extended period.

So it appears to us that the signs apparent at the beginning of the season show every likelihood of giving the grower this year some really substantial returns for his labors and investment, unless man-made disturbances upset the old applecart again and take away from the grower the returns he so justly deserves and is rightly entitled to.

Canned Grapefruit Exports Increase

Exports of canned grapefruit this year are showing a "significant increase," compared with last year, according to figures just announced by the department of commerce.

For the seven months ending in July this year, canned grapefruit exports amounted to 37,909,000 pounds, compared with 30,492,000 pounds for the same period last year. July saw 176,000 pounds exported, compared with 114,000 pounds in July, 1938.

Dollar value of the exported grapefruit for the seven-month period is given as \$2,018,000, compared with \$1,999,000 for the same period last year.

Florida canners have practically a monopoly on this canned grapefruit export business, because of the superiority of seeded Florida grapefruit for sectionizing. Great Britain

is by far the largest foreign customer. Most Florida canners have stopped operating for this season, but will resume packing in November, it is believed. Some plants may be started earlier to insure adequate supply for trade demands.

The government's figures verify predictions made several months ago that exports of canned grapefruit would show an increase of approximately 25% this year, as compared with last.

Slightly more fresh grapefruit was exported during the seven months ending in July this year as compared with 1938, but the dollar value was lower for this larger amount of fruit, the government's figures show. This year for seven months there were 858,000 boxes of fresh grapefruit exported, valued at \$1,257,000, while last year during the same period 850,000 boxes were shipped abroad with a value of \$1,304,000.

Florida Frost Service

... Now Under Way

Eckley S. Ellison, meteorologist in charge of the Florida Frost Service which is financed jointly by the U. S. Department of Agriculture Weather Bureau and the Florida Agricultural Experiment Station, announces that the frost forecast service will begin November 1.

Two official temperature bulletins will be issued daily including Sundays and holidays. The morning bulletin will be released from Lakeland at 11 a. m. and the evening bulletin at 4 p. m. In case of a major freeze a third bulletin will be issued at about 9 p. m. Specific minimum temperature forecasts will be issued for approximately eighty-one forecast stations and there will be practically no change in the list of stations for which these special temperature bulletins are prepared.

All Florida radio stations are co-operating in broadcasting these temperature forecasts. Below is a list of the stations co-operating and time of the announcements over each of the stations:

Week Days

Morning Bulletin

11:00 A. M.	WLAK
11:45 A. M.	WFOY
12:00 Noon	WJAX
12:00 Noon	WRUF
12:00 Noon (1)	WFLA
12:15 P. M.	WKAT
12:25 P. M. (3)	WIOD
12:30 P. M.	WRUF
12:30 P. M.	WTMC
12:30 P. M.	WFOY
12:30 P. M.	WJNO
12:30 P. M.	WDAE
12:30 P. M.	WKAT
12:45 P. M.	WKAT
12:45 P. M.	WMFJ
12:55 P. M.	WDBO
1:20 P. M.	WQAM
1:30 P. M. (2)	WSUN
2:00 P. M.	WDAE

Evening Bulletin

4:15 P. M.	WLAK
4:15 P. M. (1)	WFLA
4:45 P. M.	WDAE
5:00 P. M.	WLAK
5:00 P. M.	WJAX
5:00 P. M.	WRUF
5:00 P. M.	WJNO
5:00 P. M.	WQAM
5:05 P. M.	WFOY
5:15 P. M.	WMBR
6:00 P. M.	WTMC
6:00 P. M.	WMFJ

6:00 P. M. (1)	WFLA	9:00 P. M.	WTMC
6:05 P. M.	WKAT	9:45 P. M.	WMFJ
6:15 P. M.	WLAK	10:00 P. M.	WFOY
6:15 P. M.	WIOD	10:05 P. M.	WKAT
6:15 P. M. (2)	WSUN	11:00 P. M.	WDBO
6:45 P. M.	WJAX	11:00 P. M.	WQAM
7:00 P. M.	WDAE	11:15 P. M. (2)	WSUN
7:55 P. M.	WLAK		

(Continued on page 19)



*He's Just
Heard The
Good News!*

THERE IS PLENTY OF

Calcium Nitrate

We are booking seasonal requirements now

In spite of heavy increases in ocean freights and insurance you will find CALCIUM NITRATE reasonably priced again this year.

There Is Plenty of Nitrophoska Too!

We are offering all popular grades of this rich, complete fertilizer at the same old price.

See your fertilizer dealer or write us for prices, information and unexcelled field service

Jackson Grain Company

State Distributors

Tampa, Florida

Florida Citrus Growers To Benefit From Inspection Supervision Service

Merging of State grade inspection and Federal-State inspection of Florida citrus fruits will make possible in this state a reduction in the Federal-State certification fee of from \$1 per car to 60 cents per car for the coming season, the Agricultural Marketing Service announced recently. Inspection of other than standard carlots of 400 boxes will be made on the basis of 3/20 of a cent per box.

Agreed upon at a recent conference of State and Federal representatives at Washington, a single inspection certificate will now satisfy the Florida State laws and regulations and policies of the U. S. Department of Agriculture. Prior to this time the inspection routine for Florida fruit involved preparation of one certificate for the state grade inspection and one for the Federal-State certification. The single certification does not in any way affect the 1 cent per box charge assessed against Florida citrus under the State grade inspection law.

According to the Department's announcement, the new arrangement continues the Federal-State inspection agreement with the Florida State Marketing Bureau and is based upon continued operation of the Federal marketing agreement and order. H. M. Riley, formerly in charge of the Federal-State office at Tampa, has been appointed State Grade Supervisor but retains his status as a Federal supervisor. This two-way appointment qualifies Mr. Riley to act

in matters pertaining to State grade inspection as well as in his capacity with the Federal-State service.

Under the new agreement, Agricultural Marketing Service assumes the responsibility of supervising grade inspections, preparation of inspection certificates, and the licensing of inspectors employed by the State Department of Agriculture.

Further economies will be effected by merging some of the Federal-State inspection offices and State offices where facilities permit.

At least partial consolidation of the inspections has been fostered by Florida citrus interests over a period of several months. Growers have strongly urged this consolidation as an economy measure. Recent nego-

BROGDEX

REDUCES DECAY
RETARDS SHRINKAGE

THE ADVANTAGES OF OUR SERVICE

Less Decay
Better Polish
Better Keeping Qualities in the dealer's hands
A better color at a lower temperature
Less damage in coloring rooms
More weight per box upon arrival
Tight straps and a full box
Fewer adjustments on F. O. B. sales

THE COST

The savings on refrigeration and decay and on adjustments on F. O. B. sales will more than pay the small service charge. The savings on refrigeration and the higher prices received on auction sales will leave a substantial profit above the cost.

The satisfaction your fruit will give due to its superior keeping qualities will mean more F. O. B. sales.

May we discuss the matter with you?

B. C. SKINNER

DISTRIBUTOR

Brogdex Process
Color Added Process
Coloring Room Process

Dunedin, Fla.



"Soil Heartburn" affects the digestive systems and general health of citrus trees and truck crops exactly the same way that an acid stomach affects your digestion and health.

Dolomite Products, Inc.
Department D
Ocala - Florida

tations through which the new agreement was effected have been conducted by State Commissioner of Agriculture Nathan Mayo, State Marketing Commissioner L. M. Rhodes, and W. G. Meal in charge of the Fruit and Vegetable Division of the Agricultural Marketing Service.

Mr. Meal commented that "the Federal Department will cooperate fully in effecting the economies which are made possible by the agreement and which will be necessary to support adequate Federal-State inspection at a 40 per cent reduction from the charges in effect prior to this time. This is in line with the Department's desire to aid growers and shippers by providing an efficient inspection service at minimum expense to the industry."

Early Wine Making In Florida

Leesburg, Fla.,
October 4, 1939.

The Citrus Industry,
Bartow, Fla.,
Gentlemen:

In a recent issue of your paper there was a letter from Mr. Fee, I

think, in Syracuse, N. Y., asking for information about the early making of Orange wine in Florida.

I came to Florida in 1885 when the crop in the state was estimated at 900,000 boxes of Oranges. The Oranges remaining on the trees were frozen in January. The season of 86-87 the crop was about 1,250,000 boxes. In January '88 I became interested in growing Oranges and naturally in the disposition of my product.

At that time I heard of a company that was making Orange wine in volume at Clay Springs, which is now Wekiwa Springs, paying 50 cents per box for Oranges. Their wants were supplied from around Apopka. I had occasion to enquire into this

as we were willing to take 50 cents per box on the tree for our Oranges, but the expense of delivering was excessive.

This Company ceased making Orange wine after a period of a few seasons as it was given out that they had been unable to get a market. I understand that Philadelphians were interested in that enterprise and that they tried to popularize Orange wine in the Quaker City by opening wine rooms at the prominent places on the main streets but the demand did not materialize. Individuals were making Orange wine in a small way for their own consumption when I came here.

Very truly yours,
R. P. BURTON,

IRRIGATION

Ames Lockseam Slip Joint Pipe

Miller Lock Joint Pipe

Peerless Turbine Pumps

Worthington and Myers Centrifugal Pumps

The Cameron & Barkley Company

Machinery & Industrial Supplies

107 South Franklin Street

Tampa, Florida

OUR 75TH YEAR OF SERVICE



Bears MAY SLEEP ALL WINTER
...but Citrus trees do NOT!

That's why you should supply a considerable portion of nitrogen in your fertilizer now. Don't wait until next spring, when the need is acute.

HORTICULTURAL authorities in the North recommend fall application of nitrogen for deciduous fruit trees. They realize that even under Northern conditions, tree roots are not as "dormant" in winter as are the tops. They also know that much of this added nitrogen will be absorbed

by the roots and stored in the tree during the winter, ready for immediate use when vigorous activity above ground begins in the spring.

It is even more evident that citrus trees, growing in the warm Florida climate, are not "sound asleep" or "hibernating" in winter. If plant food is available in the soil, citrus trees will absorb and store this plant food for use in the spring. Be sure the nitrogen you apply now is not easily washed out of the soil. Ask for UREA, a *highly available, leaching-resistant form of nitrogen*, in your citrus fertilizer. IT STAYS PUT.

"URAMON" Fertilizer Compound
Reg. U. S. Pat. Off.
(42% Urea Nitrogen)



Urea-Ammonia Liquor
(20% Urea Nitrogen... 25% Ammonia Nitrogen)

E. I. du Pont de Nemours & Company (Inc.)

AMMONIA DEPARTMENT

WILMINGTON, DELAWARE

The Citrus Industry

with which is merged The Citrus Leaf

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STOP INTERFERENCE WITH THE GROWER

This magazine for a period of twenty years has espoused the cause of the citrus growers of Florida, deliberately refraining from the formation of any alliance with any particular group or faction, in order that we might conscientiously foster the welfare of citrus growers of Florida as a whole in preference to serving the interests of only a part of them.

The beginning of the present season presented one of the most encouraging outlooks the citrus growers of Florida have had in many seasons and nothing positive has happened to date which has materially changed this outlook.

There appear now, however, possibilities for trouble in some quarters, if the constantly increasing scope of rumors may be credited with even a small degree of reliability.

Rumors alone, of course, cannot change the facts applying to the citrus situation but when rumor is running as rampant as at present there is certain to be some basis of foundation for them. And if the conditions back of all these rumors are permitted to materialize into actualities an upheaval would result which, in our opinion, would upset the industry to a point where all the profit might be taken out of the business of growing citrus in Florida this season.

Rumors, as most of you know, concern antagonisms pertaining to washing sheds, suits affecting the citrus commission, suits affecting the advertising retain, plans to upset the industry's marketing arrangements, and numerous others of less wide scope.

Personally we do not care whether one washing shed or a hundred are erected. We don't care whether one suit or a thousand are filed. We are not promoting the interests of any advertising agency or any specific advertising program. We are not seeking to name or to discredit any members of any commission, bureau, department, group or organization.

—BUT WE ARE VITALLY INTERESTED IN THE WELFARE OF FLORIDA'S CITRUS GROWERS. And nothing, as we see it, is of so great concern at the moment as seeing that there is no interference with the possibilities for profit which thousands of Florida growers have potentially at hand.

We have a great many friends among the growers in the state's citrus industry and we do not propose to see these growers made the goats of any untimely upheaval without voicing our protest as forcefully as we know how.

This magazine does not believe that any individual, group of individuals or organization

has the right to interfere with the rights and livelihood of a class of citizens of such magnitude as are represented by the growers in the citrus industry.

We realize that if such groups or organizations exist they are in the minority, but even so if there is any purpose or intent to make a mess of the present ostensibly bright outlook they should be promptly and definitely curbed. This applies, so far as we are concerned, to all who fall into such a category no matter what may be their position in private, commercial or public life.

If there must be a fight—for heaven's sake let those afflicted with such a desire store up their venom until next summer, then strip to the skin and go to it tooth and nail.

Definitely, now is the time for co-operation—not for the sharpening of private axes.

CANNERS HOLD CONVENTION

The eighth annual meeting of the Florida Canners' Association held recently in Tampa emphasized the importance of citrus canning in Florida and particularly its importance to the growers of citrus fruits.

While it is true that the price received by the growers for "canning grade" fruit has been and still is unsatisfactory, the fact remains that the canning industry does furnish an outlet for much fruit which otherwise would be a total loss to the growers. In times of excessive production, such as was experienced last season, when even the better grade fruit was selling for less than cost of production, and when much fruit was rotting on the ground, even the small price paid for "canning grade" was a welcome addition to the revenues of many growers.

Growers have come to realize that the canning industry supplies a market for much fruit which otherwise would rot upon the ground, and while they hope that conditions may in the future make possible a better price for such fruit, they recognize the fact that the canning industry has come to stay and that the grower needs the canning plant just as the canner needs the growers' fruit.

ADVERTISING FLORIDA CITRUS

At a recent meeting of the Florida Citrus Commission a national advertising fund of \$985,000 was appropriated. This is an increase of \$135,000 over the \$850,000 spent last season. Revenues for this fund are derived from a tax of one cent per box on oranges, three cents per box on grapefruit and five cents per box on tangerines.

While this appropriation of nearly one million dollars may seem large, it is in reality small in comparison to the sums spent by certain competing citrus sections and by other competing fruits.

However, \$985,000 in advertising properly prepared, properly handled and properly distributed should have a far-reaching effect in popularizing Florida citrus fruits and an appreciable effect in stimulating the demand for and increasing the price of Florida's superior citrus

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Citrus Fruits . . . For Health And Refreshment

That the importance of citrus fruits as factors in the preservation of health and as popular elements of refreshment is becoming widely recognized, is shown by the following article from the Southeastern Drug Journal in its October issue. Physicians, dentists and dieticians recognize the health giving qualities of citrus fruits and dispensers of refreshments are finding the demand for citrus juices constantly increasing. The Southeastern Drug Journal says:

As fine a crop of citrus fruit as Florida has ever produced, juicy and fresh from the groves, will be moving to markets all over the country shortly, offering an opportunity to aggressive soda fountain operators for a substantial increase in business.

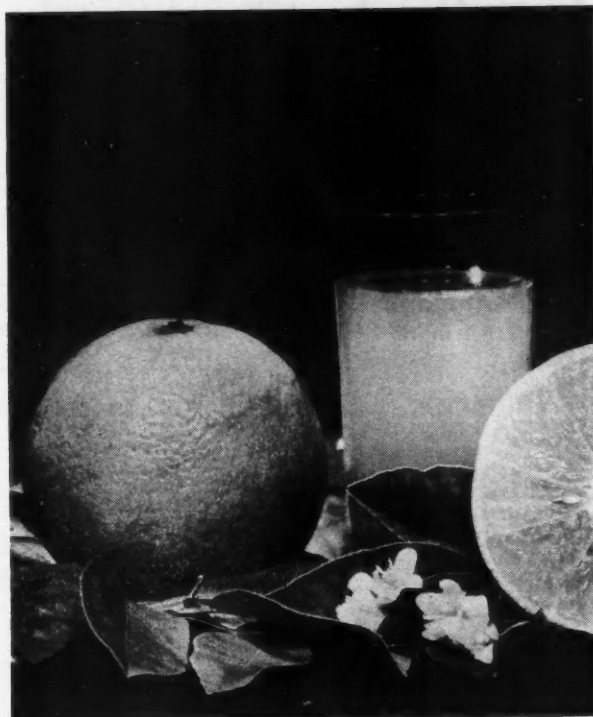
More and more, people are drinking their citrus fruits. Many still prefer their grapefruit halved, of course, but the trend even on grapefruit has been toward juice.

The grapefruit crop in Florida this season will not be as large as usual, but government reports indicate production of oranges will about equal last year, the largest up to that time. Quality of both fruits is reported excellent, Nature furnishing a happy combination of rain and sunshine which made for prime growing conditions and juicy, thin-skinned fruit.

Soda fountain operators casting about for new ways to whet the public's appetite on Florida citrus have several methods of doing this. The most popular of all citrus drinks, of course, is orange or grapefruit juice, ungarnished and served just as it comes from the fruit itself. Surveys have shown that citrus is by far the most requested item on every breakfast menu. The citric acid, which gives citrus fruit its characteristic zestful taste, freshens the mouth and actually induces a desire for additional food. It is one of the few things a soda fountain can serve without interfering with the sale of other meal-time foods.

Citrus As A Remedy For Colds

Everyone accepts the healthfulness of oranges and grapefruit. It is becoming more generally known that orange or grapefruit juice is one of the best remedies yet discovered for colds, influenza and other respiratory ailments. Interspersed with small doses of common baking soda, the combination quickly and thoroughly alkalizes the system, combating the acidity associated with such disorders. Physicians also prescribe liberal quantities of citrus fruit or juice as an excellent preventive during periods of inclement weather when epidemics threaten.



Serve Grilled Grapefruit

Most soda fountains have facilities for broiling or grilling, and one of the newer but very popular methods of serving Florida grapefruit is by broiling it. At first blush, this might seem like an unusual method of preparing, but it has been featured in some of the finest eating places and proven a public success. Grilled grapefruit is intriguing and alliterative, and lends itself well to advertising. It is not difficult to prepare. Half a Florida grapefruit is used for a serving. It should be cut and cored, and the seeds removed. The sections should be loosened by cutting around them with a knife, but the membrane is not removed. Dot the halved grapefruit generously with butter, and sprinkle with a tablespoon of brown or granulated sugar. The grapefruit is then placed under the broiler flame and allowed to brown for 10 to 15 minutes. As a variation, nutmeg or cinnamon can be sprinkled over each sugared half before dotting with butter and broiling. Some establishments pour a tablespoon of sherry wine over each sugared half, and then dot with butter and broil. Honey can be

used for sweetening instead of sugar. Perhaps other methods of varying this basically good way of serving Florida grapefruit will occur to the ingenious soda fountain man.

Baked Grapefruit Alaska

Another method of serving which is particularly appropriate for soda fountains is known as "baked grapefruit Alaska." It is Florida's version of the ritzy baked Alaska, now quite popular in many places. The grapefruit is cut in half, cored and a little more than the usual amount of the center removed. Cut around each section and sprinkle with sugar. When ready to serve, put about two heaping tablespoons of ice cream in the center cavity and cover completely with meringue. Place on board covered with white paper and brown quickly in hot oven (450 degrees). The grapefruit is then slipped from the paper onto a serving dish. It is served as a dessert.

Most soda fountains also feature salads and both oranges and grapefruit form the finest possible basis for these dishes. The "A. B. C." salad is made by cutting bananas in

(Continued on page 22)

VITA-EL -- A New Stream

High Production Of Superior Quality

Can Be Secured Only From
Soil In Proper Balance

For Best Results
Your Soil Should Be

Citrus	5.75 to 6.25 pH
Cucumbers	5.50 to 6.00 pH
Celery	5.75 to 6.25 pH
Cantaloupes	5.75 to 6.25 pH
Beans	6.50 to 7.00 pH
Pepper	6.00 to 6.50 pH
Egg Plant	6.00 to 6.50 pH
Tomatoes	5.50 to 6.00 pH
Watermelons	5.00 to 5.50 pH
Most other Vegetables	5.75 to 6.50 pH

Exceptions are Marl, Muck and other
unusual Florida Soil Types

WE WILL MAKE
YOUR SOIL READ-
ING ABSOLUTELY

FREE

Our analyses are all made by an outstand-
ing, accredited chemical laboratory — not
with a small testing kit, the results of
which are often inaccurate

Write Us For Bulletin On
The Proper Methods Of
Taking Soil Samples.

These Newest EXTREME BL

VITA-

Are The Most COMPLETE LIZ

At least all of the follow-
ing elements are now
known to be essential to
perfect crop production:

- NITROGEN
- PHOSPHORUS
- POTASH
- CALCIUM
- COPPER
- IRON
- MAGNESIUM
- MANGANESE
- SULPHUR
- ZINC

VITL

EXTRA AND
FERTIS

Contain All the
elements As Well M
Other Important
All Necessary
of Maximum Super
Quality.

Our Fertilizers Do

Because of the fact Dolomitic Limestone
to replace filler, and since this material
dients in our fertilizers, the results from no
Special acid forming brands, however, are
soils.

Our Staff Of Fie

Are Not Only Technically Trained — E
By Virtue Of Years Of Experience in A
In Florida's Truck Fields They Are Of
Practical and Dependable Counsel.

For Bigger And Better Crop

Cleaned All Purpose Fertilizer

EXTREME BRAND Fertilizers

VITA-EL

IMPLE FERTILIZERS You Can Buy

VITA-EL
EXTRA
VALUE
FERTILIZERS

in All Vital Ele-
As Well As Many
Important—
Necessary for Production
Maximum Superior
Results

If only one essential element is deficient, it becomes the limiting factor in production to the extent of the deficiency. In these cases, even if other elements are plentifully supplied they cannot be absorbed and used beyond the limits of the one deficient element.

Decrease Soil Acidity

in the manufacture of Extra Value Brands materialize the acidity of any other ingredients from not lower the pH value of your soil. However, used by us for Marl and other high pH

Fertilizers

lined — But
ence is And
y Area Offer
nsel.



SUPERIOR FERTILIZER COMPANY

FACTORY AND OFFICE EAST BROADWAY AT 47th STREET

Phone Y-1623

P. O. Box 1021

TAMPA, FLORIDA

G. D. Sloan, Pres.

W. G. Wells, Sales Manager

Take The Guesswork Out Of Fertilizing

With VITA-EL Containing
All 10 Vital Elements

Each ingredient plays a specific and important part in the general scheme of crop production — none can be omitted without taking just that much away from the Ultimate Quantity and Quality of the crop produced. It will pay you to remember that

ORDINARY FERTILIZERS CONTAIN
ONLY THREE OR FOUR OF THESE
VITAL ELEMENTS

Let us tell you how to bring your soil pH up to its Proper Value

Then Maintain This Value Through
The Use of VITA-EL Fertilizers

REMEMBER — We Will Analyze
Your Soil Samples To De-
termine The Proper pH Reading With Maximum Ac-
curacy.

ABSOLUTELY FREE!

For This Season Use VITA-EL

The GOODLY GUAVA...

ISABELLE S. THURSBY
Economist In Food Conservation
Florida Extension Service

Because of its very pungent odor, some Florida folks might take issue with the subject for discussion here and question the "goodliness" of the guava. Quite often the remark is made, "I could eat guavas if only I didn't have to smell them!"

But there are many who have made this remark on first becoming acquainted with the odor of the guava who have later become accustomed to it and now rate it as "tops" in the fruit line.

The taste for guava, one must readily admit, must usually be cultivated. The guava is one of Florida's most fascinating and delicious fruits, once this taste has been developed. Insofar as that goes, taste has to be cultivated for most of our sub-tropical fruits.

Once properly introduced to this fine fruit and having become accustomed to its penetrating aroma, one thoroughly enjoys it, whether he eats it out of hand, sliced and served as a fresh fruit with cream and sugar, combined with citrus, pineapple, bananas, and other fruits in cocktails and salads, or for dessert and shortcake. And there are few people, indeed, accustomed or not to the fresh fruit aroma, who do not like guava jelly, preserves, and pickles.

Let us study for a few minutes this fruit which is so plentiful in certain sections of our state.

The guava is the most important pomological fruit of the myrtaceous family. Now this myrtaceous family includes an interesting lot of aromatic plants, all having flowers bearing many long and conspicuous stamens. Of the well-known economic family connections there are the spices—clove, cinnamon, nutmeg, and allspice. With such a spicy family background, how can the guava be anything but aromatic—obtrusively aromatic, some would say. Other fruit plants of this family are the beautiful and delectable little Surinam cherry, the lesser known down-myrtle, and the larger growing, handsome roseapple with its crisp, sweet rose-flavored fruits. Then on the ornamental side of the family tree, there is the eucalyptus, myrtus, callistemon, metrosideros, and melaleuca—all valuable plants for Florida gardens. The guava has a right to be proud of all its relatives, whatever side of the family tree they are on.

And where is there to be found a more cosmopolitan fruit than the guava? You find it here, there everywhere. Thoroughly at home as an ornamental planting on the lawn of a millionaire's estate, growing right by the side of the flashing red hibiscus or the dawn-pink oleander. Or perhaps you see it as the only shade and the only fruit tree about a humble shack. It ranges from the southernmost Florida Key even farther north than Volusia county on the east coast, and as far north as Citrus county on the Gulf.

There are those who have been guilty of referring to the guava as Florida's substitute peach—an undeserved, misplaced term. The guava is much too distinctive, too characteristic, to individualistic to substitute for any other fruit in the wide world. Certainly it differs from the peach in many important points. For instance, the guava does not produce all of its bloom at one time, but many varieties will bloom and bear fruit throughout the greater part of the year. In productiveness it excels most other fruit trees as it has no "off" years, so to speak. It is one of the least exacting of all the sub-tropical fruits in cultural requirement, and it grows and flourishes under a variety of conditions. It thrives in light, sandy soil, or on heavy land. Besides its productivity, it has the ability to withstand severe frosts and has no insect enemies. While it will produce satisfactory crops under poor conditions, the guava responds most generously to proper cultivation and fertilization and will yield larger, finer fruits with a little extra care.

Except in a very limited way, this interestingly obtrusive, free-bearing, subtropical adventurer has not been accepted or appreciated in Florida, either by the home canner or the commercial canning industry except as a jelly making fruit par excellence. But in the years ahead, it will be found that in this common guava Florida people have not only a full-bodied, superior flavored fruit, but one of high nutritive value for beverage making, whose manufacture would offer no competition within the limits of the entire United States.

As you know, for the past ten years we have been drinking our fruits more and more, and now our vege-

tables too. This steadily increasing consumer demand for juice products will surely bring the ubiquitous guava into utilization as a valuable beverage and syrup base right here in Florida as well as outside of the state.

Particularly is the guava adapted for making the very new pulpy fruit-juice type beverage, like tomato juice, which, as you know, consists of both juice and pulp—the whole ripe tomato in liquid form, minus skin, seed, and heavy fibre. Of course, with the thicker, pulpy fruit juices, a sugar syrup must be added to make the mixture of a "drinkable" consistency. Today in our markets, one may buy pulpy fruit juices made from apricots, peaches, pears, plums, loganberries, and other berries. The guava is even more ideal for use in the same manner because of the ease with which it may be reduced to the liquid, or puree form, and because of its distinctive flavor.

In addition, and perhaps of even greater importance, the guava is winning favorable recognition for its Vitamin C content. Florida babies and adults and others alike may look also to the goodly guava for generous quantities of Vitamin C, for A, and B and for valuable mineral salts,—all vitally essential to an adequate diet.

Thus, we can readily see that the virtues of the guava are many and its uses too numerous to mention. One could talk on and on about these uses—fresh or in general cookery. One could speak highly of the guava as a canned fruit—of its texture and beautiful coloring, of its use as a delectable and intriguing preserve, or as an unparalleled sweet pickle.

But, instead, at the risk of repeating, we would like to remind folks living in the sections where guavas grow that at their very doors there ripens such a delectable fruit from which they can enjoy and merchandise distinctive products that as yet have no equal—products made from Florida's own—GOODLY GUAVA!

COLUMBIA INCREASES 4-H

With enrollment cards still coming in Columbia county's 4-H girls club membership is now well over 300, an increase of more than 100 over last year, Mrs. Ruth Durrenberger, home agent reports.

The World Citrus Situation

United States Department of Agriculture, Bureau of Agricultural Economics

World citrus production has increased at the average rate of about 10 million boxes per year during the past decade and probably will continue to expand in the next 5 to 10 years.

World orange production (including mandarins and tangerines) has increased at the average rate of about 8 million boxes per year during the past decade. The United States, Brazil, Palestine, Japan and the Union of South Africa have been the principal contributors to this expansion. Orange production in Spain, an important orange exporting country, has declined in recent years.

The expansion of world grapefruit production also has been at a very rapid rate. In the United States, the principal producing country, production during the past 10 years has more than trebled, while in Palestine and the Union of South Africa the increase has been striking.

World lemon production reached a peak in 1932 but has since declined, the recent sharp decline in Italy more than offsetting the rapid expansion in the United States.

The production of oranges in the United States has about trebled in the past 20 years, grapefruit production has increased nearly sevenfold, and lemon production has more than doubled. Although exports of citrus, as a whole, also have increased in recent years, they have not kept pace with the expansion in domestic production. The increase in United States orange exports in the past decade has been at about the same proportional rate as that of production. Lemon exports have increased at a slightly faster rate than production. Exports of grapefruit, on the other hand, have failed to keep pace with production, particularly in the last 5 years. In no case was the absolute increase in exports equal to the absolute increase in production, and, as a consequence, consumption of citrus fruits has increased sharply in the past two decades.

The sharp increase in consumption of citrus fruits during the past 20 years resulted in part from an increase in domestic demand and in part from the declining prices which accompanied the sharp increase in production. It appears that the domestic demand for citrus fruits increased sharply during the 1920's, declined during the depression per-

iod of the early 1930's but regained part of this loss in the last 5 years.

In general, foreign demand for United States oranges and grapefruit has declined in recent years, largely as a result of trade restrictions and increasing competition from foreign produced citrus. There is some evidence that foreign demand for American lemons is increasing.

Though the United States produces nearly one-half of the world's citrus crops, not more than 10 per cent of the annual production is usually exported. In recent years exports of oranges from Spain, Palestine and Brazil have exceeded those from the United States, while exports of lemons from Italy and Spain and of grapefruit from Palestine have been greater. For most of these countries the export market has provided an important outlet for citrus crops.

Because of the prospective continued expansion of production of oranges and grapefruit in Palestine and the Union of South Africa, it is likely that exports from these areas will increase sharply in the next few years.

Exports of oranges from Spain declined sharply during the period of civil war, but no information is available as to the trend in the immediate future.

The United Kingdom is by far the leading importer of citrus fruits, although Germany, France, Canada, the Netherlands and Belgium also are important. These six countries usually account for about 90 per cent of total citrus imports. In recent years an increasing proportion of total citrus imports into the United Kingdom have come from Empire sources, particularly Palestine and the Union of South Africa. Total imports of citrus into Germany have declined sharply in recent years, although those from Italy have maintained a stable level and increased in the case of some fruits.

Canada is the principal outlet for United States citrus fruits and has become relatively more important in recent years when exports from the United States to the United Kingdom have tended to decline.

Trend of World Citrus Production

World production of citrus fruits has increased at a tremendous rate during the past two decades, and the indications are that it will continue to expand sharply during the next

10 years unless the standing groves suffer some unusual weather or disease damage. During the 10 years ending with 1937, the increase of approximately 100 million boxes for the three important classes — oranges (including mandarins and tangerines), grapefruit and lemons combined — brought the total annual world output (excluding China and Egypt) up to about 240 million boxes. Based upon preliminary indications the total citrus crop from the bloom of 1938 is likely to total close to 260 million boxes.

The estimate for 1937 is composed of 185 million boxes of oranges (including mandarins and tangerines), 35 million boxes of grapefruit and 21 million boxes of lemons, as compared with 108, 11 and 18 million boxes, respectively, 10 years earlier. On the basis of total quantities, the production of oranges shows the greatest growth, but the expansion of grapefruit was the greatest in relation to the size of the crop.

During the 10 years ending with 1937, the annual increase in world orange production averaged about 8 million boxes per year, while that for grapefruit averaged 2.3 million. Although lemon production shows practically no change in level between 1927 and 1932, the crop expanded to a relatively high level between 1927 and 1932, and then declined. The peak of world production of lemons occurred in 1932 when the crop totaled about 27.4 million boxes.

Although the increase in production of citrus fruits, particularly of oranges and grapefruit, has been fairly general in nearly all producing countries, the rapid expansion in the United States in the last decade has contributed most to the larger output in recent years. As a result, the United States has become a definite leader in the production of each major class of citrus. In 1937 the United States produced nearly 41 per cent of the world orange crop, 90 per cent of the grapefruit, and about 45 per cent of the world's lemons. In 1927, ten years earlier, the proportions were 30 per cent, 85 per cent and 30 per cent, respectively.

Despite the fact that the United States produces about one-half of the world's citrus crop, Spain, Italy and, in recent years, Palestine, ex-

(Continued on page 18)

The LYONIZER

Department

COMPILED BY THE LYONS FERTILIZER CO.

Salesmen Report From The Field

NORTH CENTRAL FLORIDA

G. W. Phillips

The past several weeks have been extremely hot and dry, although recently we have had cool to chilly nights. Many early fruit crops have been sold at good prices, ranging from \$1.00 to \$1.35. The color and eating qualities in many groves are the best I have ever seen at this time of year. Growers at this time are doing more spraying, dusting and cultivation than they have done in the past few years, and consequently the quality is very good throughout the territory. There is a great deal of interest in the fall application of fertilizer, and most of our growers are planning to use mixed fertilizers in which will be included a complete range of secondary plant food elements.

WEST CENTRAL FLORIDA

S. A. McCartney

The acreage of strawberries grown in the Plant City area will be somewhat reduced this season. This was caused by late summer rains that caused a great deal of damage to plants. Berry growers found it necessary to have a large percentage of their plants shipped in from other sections. The tangerine and orange crop in Hernando County is the best grown in a number of years. The tangerines are especially fine, and growers feel very much encouraged. There is quite a bit of optimism throughout this territory.

POLK AND HIGHLANDS COUNTIES

Jim Sample

Polk County is rapidly moving its maturity tested fruit. Oranges and grapefruit are being picked and the prices have been well above last season's levels. Some tangerines have been picked at \$1.00 per box on the tree. High-

lands County has not moved as much fruit as we would ordinarily expect them to move. However, this section was badly damaged by the drought in the spring, and they have quite a bit of late bloom. With the prospects of better fruit prices, most growers are already planning their fall application of fertilizer. Along this line and particularly encouraging from a horticultural point of view, is the fact that nearly all growers are anxious to apply good liberal applications of well balanced plant foods. Recently we have heard a good many grove owners voice the opinion, "that it certainly doesn't pay to fertilize a grove with cheap fertilizers."

EAST COAST

F. M. Scott

Crops are being planted very rapidly on the East Coast. Indications are that the tomato acreage will show considerable increase with the season extending over a longer period of time. Many fields in the glades have already been planted. The potato acreage will be about the same as last year. Peppers, lima beans and tomatoes from Pompano north to Lake Worth are looking very good. Excessive rains have damaged some crops around Lake Okeechobee, and delayed planting in others. Some few beans are moving now, but prices are only fair for small lots.

SOUTHWEST FLORIDA

Frank Dillinger

Crops throughout this section are looking very good. In the Palmetto section quite an acreage of cabbage is being planted. The acreage that has already been set are growing off very nicely. Many growers in this section are planning to make fall planting of iceberg lettuce and have gone for-

Personal Items

E. T. Lyle, Orlando, recently returned from a month's trip to New York and Kentucky. He was a most surprised man to learn upon his return here that he was expected in Tallahassee to be appointed to serve on the Florida Citrus Commission. We congratulate Mr. Lyle on this honor, and at the same time feel that the commission is fortunate in having a man of Mr. Lyle's ability as a member of the commission.

It is common talk throughout the ridge section that the St. Helena Citrus corporation groves, operated by John Snively, Jr., has the most consistent crop of quality fruit grown on the ridge.

E. C. Futch of Dade City is among the new Lyons' 100 percenters.

ward with the preparation of their land. There is quite an acreage of gladiola being planted throughout the territory. The early plantings of glads are doing very nicely in both the Bradenton and Ft. Myers sections.

HILLSBOROUGH & PINELLAS COUNTIES

C. S. Little

Growers throughout this territory have started with their fall application of fertilizer to their grove property. In view of the heavy rains that we have had this summer, the growers are making application of balanced fertilizers, and many formulas are carrying a complete range of secondary plant food elements. Many packing houses have started operations, and the movement of fruit has been heavy for the past few weeks. Our growers are feeling encouraged over the prospects for the season, and are showing a great deal of interest in getting their grove property in first class condition.

ADVERTISEMENT — THE LYONS FERTILIZER CO.

NOVEMBER SUGGESTIONS FOR GROVE AND FARM CARE

Prepared by Horticultural Department, Lyons Fertilizer Co.

CULTIVATION

After making fall application of fertilizer give grove thorough cultivation and let go for the winter months. Many growers are plowing their groves this fall, applying fertilizer, then disking very thoroughly. We think this an excellent program. Keep young trees worked out.

PEST CONTROL

Pumpkin bugs are doing some real damage at this time. They will be active in November. Be sure and cut down crotalaria, beggar weed and other cover crop from around the tree. Keep careful check on rust mite. They are extremely active at this time. Keep an eye on all vegetable diseases and insects, and if necessary spray promptly. Just a little procrastination will mean the loss of a crop.

FERTILIZER

Get in touch with your Lyons Field man at once and discuss with him your fertilizer requirements for fall application. The fall application is very important. It helps to keep your trees in good condition during the winter months, and will determine to a large extent the amount of fruit that your trees will set next spring. If your trees are showing any secondary plant food deficiencies, have the required materials included with your fertilizer. Our field men are well posted along this line, and can give you some valuable information.

COVER CROPS

Be sure and get your cover crop thoroughly worked into the soil. If allowed to dry out on top of soil it becomes a fire hazard, and might cause great damage.

PRUNING

Remove dead wood from trees. By removing dead wood from the trees this fall you will accomplish a great deal in control of melanose next spring.

Mr. Eugene Dodd of Atlanta is in Florida looking over his large grove properties near Maitland.

E. N. McPherson, Maitland, expects to have his new packing house ready for operation soon. While not large in comparison to some other houses, it will be a "honey" for efficiency. Ralph Arrington is associated with Kenneth and has an enviable reputation in the citrus fruit business.

Mrs. Geo. Allen of Floral City, has sold her oranges. This crop being of excellent quality, Mrs. Allen was able to make a very good sale, and again bears out the fact that it pays to grow quality fruit.

When it comes to growing quantity crops of real quality fruit year in and year out, we tip our hat to Mr. S. W. Bail of Redlands Groves, Hicora. He has another fine crop of fruit this season. Mr. Bail believes that he is using the best fertilizer that it is possible to buy, and since it is our product we want to assure him that his supposition is correct.

G. E. Weatherington, our new dealer at Turkey Creek, has moved his complete stock into a new location and is ready to serve his many friends and customers.

The Brooksville Citrus Growers Association after thoroughly repairing their plant this summer, have started packing operations. These people have a very nice crop of fruit to pack this season, and we hope that their returns will be entirely satisfactory.

C. E. Jackson, jr., of Palm Harbor, has completed his packing house and is ready for operation. Mr. Jackson has a very nice crop of fruit this season, and as usual is in position to boast of some of the finest quality in Pinellas County.

John Parker of Arcadia, our very capable agent, is interested in the arrival of the bird season. John has a young dog with one year's hunting experience that is going to be a "whiz" this year. Frankly we are interested in this sport along with John, and when we go out with him we feel sure of getting some birds. There will be several afternoons when the Boss will be paying us to do a little hunting.

Some people inherit wealth, some health — and some an evil disposition.

Little Bits of FUN



HIS MONEY'S WORTH

Murphy's landlady said: "Pat, I'm afraid I shall have to charge another 2 shillings. You're such a big eater."

"For heaven's sake don't do that!" said Murphy. "I'm killin' myself already tryin' to eat what I'm payin' for now."

PRETTY WARM

Critic: "You have made your hero too hot headed, I'm afraid."

Budding writer: "How do you mean?"

Critic: "Well, he has a lantern jaw to begin with. And so his whole face lit up! His cheeks flamed; he gave a burning glance, and then, blazing with wrath and boiling with rage, he administered a scorching rebuke."

"Dearest," said the new husband to his bride, "do you really think I'll prove a satisfactory mate?"

"Oh, you'll do for a mate all right," answered his precious girl. "Now look me over and tell me what you think of your captain."

DELETION

Mrs. Newbride: "I took the recipe for this cake out of the cook book."

Hubby: "You did perfectly right, dear. It never should have been put in."

A woman came into a car with five children. She busied herself seating them. A sailor arose and gave her his seat.

"Are those all your children, madam," he asked, "or is it a picnic?"

"They're all mine," snapped the woman, "and it's no picnic."

Mike: "Did you ever see a company of women silent?"

Ike: "Yeah."

Mike: "When?"

Ike: "When the chairman asked the oldest lady to speak up."

EDITORIAL (Continued from page 10)

products.

Florida citrus growers have come to look upon their investment in advertising as second on-

ly in importance to their investment in their groves. The per box tax on their products is infinitesimal in comparison to the benefits received. In the years to come a much greater advertising expenditure will be justified in expanding the sales of Florida citrus fruits.

THE WORLD CITRUS SITUATION

(Continued from page 15)

ceed in the quantities exported to world markets. All but about 10 percent of the United States citrus crop is consumed within the country. The average annual exports of oranges from Spain for the period 1930-34 were 8 times as large as from the United States, or about 26.5 million boxes from Spain compared with 3.4 million boxes from the United States. Orange exports from Palestine averaged 3.7 million boxes but had increased to 10.2 million in 1937. Because of the freeze damage in the early part of 1937 and consequent reduction in the crop for that season, exports of oranges from the United States declined to 2.5 million boxes in 1937. Exports from each of several other countries, Italy, and the Union of South Africa and Brazil, were also slightly larger than those from the United States in 1937. In 1938, however, exports of oranges from the United States increased to about 8 million boxes and no doubt exceeded those from all other countries except Spain and Palestine.

In the case of lemons the United States has only recently become a net exporter, total exports reaching 798,000 boxes in 1938. Italy is the chief source of lemons entering international trade, exports in 1937 totaling 6.3 million boxes. Another important lemon exporting country is Spain with 582,000 boxes in 1935, the last year for which the information is available.

Although the United States is by far the world's largest producer of grapefruit, it usually exports only a small proportion of the crop, rarely more than a million boxes. In contrast practically all of the grapefruit produced in the other important producing countries enters international trade. In recent years exports from Palestine have expanded with production and totaled 1.8 million boxes in the 1937-38 season. The Union of South Africa, Cuba and Puerto Rico, each with several hundred thousand boxes annually, are also important exporters of grapefruit.

Great Expansion in Orange Production and Exports

For the most part the great expansion occurring in orange production in the past two decades has taken place in seven countries, the

United States, Brazil, Spain, Italy, Japan, Palestine and the Union of South Africa. These seven countries combined produced close to 170 million boxes of oranges from the bloom of 1937 out of an approximate total world crop (excluding China and Egypt) of 185 million boxes. In 1919 these seven countries produced about 63.3 million boxes out of a total world crop of 74.4 million. Incidentally, these seven countries supply practically all of the oranges entering international trade, with Spain, Palestine, Brazil and the Union of South Africa being the leaders in recent years.

United States

The production of oranges in the United States has almost trebled in volume in the past 20 years and almost doubled in the last 10 years. The 5-year average production for the period, 1925-29, was 39.0 million boxes, while the average for the last 5 years, 1934-38, was 65.4 million boxes, and production in 1937 totaled 74,476,000 boxes. A preliminary report for 1938 indicates a total crop of 75,871,000 boxes. Barring unusual weather damage and assuming a continuation of reasonable care of groves, United States production of oranges may be expected to continue to expand in the next 5 to 10 years.

Although annual exports of oranges in the United States have varied widely in the past decade, the long-time trend has been upward and at about the same rate as production. Prior to the depression period, exports from the United States accounted for from 8 to 10 percent of the production in their country but in 1932 only 6 percent. There was some recovery in the next 4 years, but in 1937 exports declined to only 2,500,000 boxes, or 4.5 percent of production. The sharp decline in 1937 was due largely to the sharp decline that occurred in the exports to Europe and particularly to the United Kingdom. In 1938 the largest quantity of oranges on record were exported from the United States, slightly more than 8 million boxes, or about 10.5 percent of the record large crop available. There was a marked recovery in exports to the United Kingdom and other European countries, as well as a sharp increase in exports to Canada, the leading foreign market for United States oranges.

Although the long-time trend of exports of oranges from the United States corresponds closely to that of production, exports have not increased sufficiently to absorb the absolute increase in production. As a consequence, domestic consumption has expanded sharply during the past two decades. This expansion in domestic consumption resulted in part from an increasing demand occasioned by expansion of consumer buying power and in part from declining prices. During the first half of the 20-year period domestic demand for oranges expanded sharply, but in the last 10 years consumer purchasing power has fluctuated with general business conditions and is now at a lower level than 10 years earlier. Prices have declined sharply under the pressure of increasing supplies and the lower level of demand. Trade restrictions and increasing production in foreign countries has reduced the foreign demand for United States oranges in recent years.

World lemon production reached a peak of 27.5 million boxes in the 1932-33 season largely as a result of a record crop produced in Italy that season. Since 1932-33 production in Italy has declined by more than 50 percent, or more than enough to offset the rapid expansion that has taken place in the United States, and world production has declined to around 20 million boxes per year. Lemon production in the United States has about doubled during the past 20 years. The indications are that the world crop from the 1937 bloom totaled 20.7 million boxes. Other than the early indications of the United States crop for 1938 are for a record large production of 10.7 million boxes, no information is available as to world production from the 1938 bloom.

In the past two decades 3 countries — Italy, the United States, and Spain — have produced the bulk of the world's lemons. Some of the minor producing countries are Greece, Algeria, Australia and Mexico. In more recent years production has expanded rapidly in Cyprus, Palestine, and the Union of South Africa, but in each of these countries the lemon crop is still relatively unimportant.

Until recently Italy and Spain were the chief exporting countries. Owing to the rapid expansion in production in the United States in recent

November, 1939

years, however, exports from this country have gained considerably. The United States became a net exporter of lemons in 1930-31 when net exports totaled 6,000 boxes. Prior to that time the United States was on a net import basis for lemons, annual net imports varying between 360,000 and 1,600,000 boxes in the preceding decade. By 1935-36 net exports had increased to 548,000 boxes. Calendar year exports of lemons from the United States totaled 798,000 boxes in 1938, and the United Kingdom and Canada were the principal markets.

The fact that the United States has shifted from a net import to a net export basis for lemons during the past two decades indicates that the increase in domestic consumption has not kept pace with the increase in production. The upward trend in consumption has been influenced by a gradual long-time increase in demand, although in years of very large supplies prices declined to relatively low levels and resulted in a further expansion of consumption. It is apparent that this domestic demand for lemons has recovered most of the loss that occurred during the depression period. Because of the recent decline in foreign production of lemons, it is also apparent that foreign demand for United States lemons has increased.

Grapefruit Production has Increased Sharply

World production of grapefruit has increased at a tremendous rate during the past two decades largely because of the expansion in the United States, the principal producing country. In recent years, however, grapefruit production in Palestine and Union of South Africa has increased sharply, and these two countries have become important sources of exports to European markets. Practically all of the grapefruit produced in these two areas is exported. In 1936 and 1937 exports from Palestine exceeded those from the United States.

Domestic consumption of grapefruit has increased at about the same rate as production in the earlier decade. Continental United States shifted from a net import to a net export basis for grapefruit in 1928. The rapid expansion in the consumption of grapefruit in recent years resulted in large part from a sharp decline in prices, although changing consumer purchasing power as influenced by general business conditions had an important influence. Because of increasing competition of foreign grapefruit, it is apparent that foreign demand for United States grape-

THE CITRUS INDUSTRY

fruit has declined.

The United Kingdom and Canada are the principal foreign markets for grapefruit exported from the United States. The volume of exports to the United Kingdom has declined in recent years while those to Canada have increased. Grapefruit exports from Palestine and the Union of South Africa to the United Kingdom have rapidly replaced those from the United States. In 1937-38 exports of Palestine to the United Kingdom totaled 1,023,000 boxes as compared with only 195,000 boxes 5 years earlier.

FLORIDA FROST SERVICE NOW UNDER W A Y

(Continued from page 7)

Sundays

Morning Bulletin

11:05 A. M.	WLAK
12:00 Noon	WJAX
12:00 Noon	WFOY
12:00 Noon	WRUF
12:00 Noon	WLAK
12:00 Noon	WQAM
12:05 P. M.	WKAT
12:25 P. M.	WIOD
12:30 P. M.	WRUF
12:30 P. M.	WTMC
12:30 P. M.	WDAE
12:30 P. M.	WJNO
12:30 P. M.	WKAT
12:45 P. M.	WMBR
12:45 P. M.	WMFR
12:55 P. M.	WDBO
1:30 P. M.	WSUN

Evening Bulletin

4:00 P. M.	WLAK
4:30 P. M.	WDAE
4:55 P. M.	WDBO
5:00 P. M.	WJAX
5:00 P. M.	WMBR
5:00 P. M.	WRUF
5:00 P. M.	WJNO
5:00 P. M.	WQAM
5:15 P. M.	WFOY
6:00 P. M.	WTMC
6:00 P. M.	WMFJ
6:00 P. M.	WLAK
6:05 P. M.	WKAT
6:30 P. M.	WSUN
6:30 P. M.	WIOD
6:45 P. M.	WJAX
8:30 P. M.	WFOY
8:45 P. M.	WMFJ
9:00 P. M.	WTMC
10:05 P. M.	WKAT
10:30 P. M.	WFLA
11:00 P. M.	WDAE
11:00 P. M.	WDBO
11:00 P. M.	WIOD
11:00 P. M.	WQAM

All stations give frequent additional service when frost is forecast.

(1) Broadcasts made only on Monday, Wednesday and Friday.

(2) Broadcasts made only on

Nineteen

Tuesday, Thursday and Saturday.

(3) Broadcast made at 12:00 noon on Saturday.

Florida Radio Stations Broadcasting Official Temperature Bulletins

Station	City	Kilocycles	Day Power	Night Power
WJAX	Jacksonville	900	5000	1000
WMBR	Jacksonville	1370	250	100
WRUF	Gainesville	830	5000	off
WTMC	Ocala	1500	100	100
WFOY	St. Augustine	1210	250	100
WMFJ	Daytona B.	1420	100	100
WDBO	Orlando	580	5000	1000
WLAK	Lakeland	1310	250	100
WDAE	Tampa	1220	5000	1000
WFLA	Tampa	620	5000	1000
WSUN	St. Pete	620	5000	1000
WJNO	W. P. Beach	1200	250	100
WKAT	Miami B.	1500	100	100
WIOD	Miami	610	1000	1000
WQAM	Miami	560	1000	1000

In 1938, 1238 Florida farmers constructed 1072.2 miles of terracing under the AAA program.



AIR CONDITIONED
51%

JACKSONVILLE'S
LARGEST and
FINEST HOTEL
300 Rooms
300 Baths

The ROOSEVELT

JACKSONVILLE FLORIDA
Charlie Griner, Manager

GARAGE
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SOME SEASONAL

CITRUS POINTERS

(Continued from page 5)

that the tree is dependent for an ample supply of food to carry it through the winter months in as good a physical condition as possible. We figure that the fall application is the first one of the new crop year. In the demonstration groves we have referred to we fertilize our trees on a 1 to 1 or 1 to 1½ ratio of nitrogen to potash. In so doing it is necessary to adjust the cultural program to fit the fertilizer program. Here's why. One of the most popular fertilizer materials for the fall application in Lake County demonstration groves is Nitrate of Soda Potash which analyzes 14 per cent nitrogen and 14 per cent potash. Now if this material were applied to a grove soil in the fall and plowed or disced under, quite a considerable amount of new growth late in the season might result. Then if a cold snap should occur it would be reasonable to expect that the new growth would be nipped.

In our demonstration groves we commonly disc the grove before the fertilizer is applied to incorporate the cover crop into the soil and thereby remove the fire hazard. Then the fertilizer we have before mentioned is applied but the grove is not disced again. We seldom see any new growth in the late fall from this procedure and the trees are usually in excellent physical condition to withstand the cold weather. Nitrate of Soda Potash is not the only fertilizer used in the fall in Lake County demonstration groves. It is used more than any other one analysis, but there are so many factors that enter into the picture that each grower must study his grove carefully before he can decide what analysis and what materials will best suit his purpose.

During the past several years much has been brought to light by research workers about the minerals and the part they play in keeping our trees healthy. Some unusually fine demonstrations on the results of the use of copper, zinc, manganese, magnesium and other fertilizer materials may be seen at the Citrus Experiment Station. Growers will find it worth their time to go over these plots and find out just how important the so-called minor elements are. Most of them can be added to your fertilizers if you need them. To learn to recognize the various deficiency symptoms so that he will know which materials to tell his fertilizer man

THE CITRUS INDUSTRY.

November, 1939

to add to his grove formula might be worth while for every grower.

Growers who are equipped to irrigate will want to watch conditions carefully in the grove during the fall, winter and spring months. The total rainfall in Florida each season is more than ample to produce a crop, but the trouble is that it is not evenly distributed and quite often we get too much during the summer months and not enough during the balance of the year. Irrigation systems should be held in readiness to supply moisture during the fall and winter to keep the fruit from becoming soft and to keep it from dropping. According to the results of demonstrations conducted by E. F. DeBusk, Extension Citriculturist, the grove should have an equivalent of an acre inch of water every ten days. If it rains this much everything is fine, but if it does not then irrigation water should be supplied. It is usually the best procedure to apply from 2 to 3 acre inches of water at a time

and then wait three or four weeks to apply more. Trees seem to wilt less when they receive an ample supply of water and then are left alone until they need it again. Growers frequently find it advantageous to have a rain gauge in the grove. This enables them to tell when to apply water rather than waiting until adverse conditions actually occur in the grove. From the records of R. H. Howard, Assistant Extension Economist, we find that irrigation practices pay big dividends in most years in the groves included in his study.

An important operation in the grove, particularly those groves most likely to be affected by cold, is to get the wood piled where it can be distributed easily throughout the grove. Many growers pile enough wood for each fire under the trees, and then after the last cultivation in the fall or when cold weather is predicted they stack the wood in the checks ready for immediate lighting.

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Mexican Fruit Fly Quarantine Regula- tions Extended

Discovery of additional infestations of the Mexican fruit fly in Texas, led the U. S. Department of Agriculture to extend the quarantine regulations relating to the pest to include the counties of Dimmit, LaSalle, and Webb, Texas. The new regulations became effective October 16. The regulated area now includes six counties and part of another, all in Southern Texas.

The harvesting season for host fruits of the fly as specified under current quarantine regulations remains the same as heretofore—from September through April of each year—except that in the three newly regulated counties, the harvesting season for grapefruit ends with the last of February. A host-free period must be observed in all the regulated area throughout the remainder of the year. These local control measures are provided under Texas State regulations.

Citrus fruits, when produced under such conditions as to render them free from infestation by the Mexican fruit fly, may be shipped interstate

from the regulated area under Federal permit, except that no restrictions are placed on the interstate movement of lemons and sour limes and no permit is required in shipping these fruits.

Plan Free Juice Stands

Plans for a number of free juice stands on arterial highways used by winter visitors in entering Florida will be further discussed at a meeting in Winter Haven November 5 of members of the state citrus committee of the Florida Junior Chamber of Commerce and state officials,

together with representatives of the citrus commission and the industry.

Suggestion for the juice stands was made by Murl Pace, general manager of the United Growers and Shippers association, Orlando. It was discussed recently at a meeting of the citrus committee with its advisory group, and a special group appointed to develop information and report at the November 5 session. Whether the plan is feasible will probably be discussed at that time.

Nathan Mayo, commissioner of agriculture, has been invited to attend the meeting in Winter Haven, and the citrus commission also will be asked to send a representative.

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CITRUS FRUITS... FOR HEALTH AND REFRESHMENT

(Continued from page 11)

thin slices, sprinkle with lemon juice and arrange in rows, between mounds of Florida grapefruit sections. Alternate with sections of fresh or canned apricots. This is also good served with a cooked salad dressing.

A Florida special salad is made with sections of fresh tomatoes between mounds of grapefruit sections. With a scoop, make balls of avocado and arrange them in intervals on plate. This is served with French dressing.

Try Banana Orange Milk Shake

A drink which can be made a "special" at any soda fountain, if properly pushed and popularized, is the banana orange milk shake. Bananas are sliced into a bowl and beat with electric mixer until creamy. One-half cup of cold milk is added for each banana, and one-half cup of Florida orange juice. This is sweetened with one-half teaspoon sugar. These ingredients are mixed thoroughly and served very cold.

These are but a few ways, of course, to utilize the crop of fine Florida citrus fruits just beginning to move to market. Rich in minerals and vitamins, citrus fruits have the double advantage of being good to taste and good for the taster. Florida oranges are noted for their thin skins, which accounts for their unusual juiciness because of the additional room inside for juice. The difference in market price will be caused chiefly by difference in size. However, the soda fountain operator can safely count on 2½ quarts of juice from each 10 pounds of Florida oranges, regardless of size.

Incidentally, the federal government recently announced that it was perfectly all right to keep orange juice in a loosely covered container overnight in the refrigerator. Such juice will not lose any appreciable amount of its vitamin content if used within 24 hours, the government has determined by research. This makes it possible to squeeze sufficient juice in advance to speed up service, although an occasional word of explanation to the customer may be necessary where he still harbors the old belief that citrus juice must be squeezed and consumed immediately to get the vitamins.

Citrus fruits are easily and quickly adapted to back bar and window displays. The brilliant colors of carefully chosen oranges and grapefruit attract the prospective customer and

THE CITRUS INDUSTRY

an appetizing display is many times responsible for the sale of citrus drinks. Along this line, the Florida Citrus Commission, a state agency which spends nearly a million dollars a year in telling the public about the goodness of Florida fruits, has available back bar display material of several types and will furnish it to any store upon request. A letter or card addressed to them at Lakeland, Florida, is all that is necessary.

Get behind a movement to sell more citrus in your town. The results of an aggressive promotion of these fruits will show an increase in sales throughout your store.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, OF THE CITRUS INDUSTRY, PUBLISHED MONTHLY AT BARTOW, FLORIDA, FOR OCTOBER, 1939. COUNTY OF POLK, STATE OF FLORIDA.

Before me, a notary public in and for the State and county aforesaid, personally appeared S. Lloyd Frisbie, who having been duly sworn according to law, deposes and says that he is the Business Manager of The Citrus Industry, and that the following is to the best of his knowledge and belief, a true statement of the ownership, management, (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in Section 411, Postal Laws and Regulations, printed on the reverse side of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher — Associated Publications Corp., Bartow, Fla.
Editor — S. L. Frisbie, Tampa, Fla.
Business Manager — S. Lloyd Frisbie, Bartow, Fla.

2. That the owners are:
Associated Publications Corporation,
Bartow, Florida.

S. L. Frisbie, Tampa, Fla.
S. Lloyd Frisbie, Bartow, Fla.
Loyal Frisbie, Bartow, Fla.
B. L. Gable, New York, N. Y.
F. L. Skelly, Orlando, Fla.
B. W. Skinner, Dunedin, Fla.
F. P. Wall, Mansfield, Ohio.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are:

American Fire & Casualty Co., Orlando, Fla.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

S. LLOYD FRISBIE,
Business Manager.

Sworn to and subscribed before me
this 25th day of September, 1939.

(SEAL) H. M. STANFILL,

Notary Public.

(My commission expires 11-8-1942).

CLASSIFIED

Advertisements

The rate for advertisements of this nature is only five cents per word for each insertion. You may count the number of words you have, multiply it by five, and you will have the cost of the advertisement for one insertion. Multiply this by the total number of insertions desired and you will have the total cost. This rate is so low that we cannot charge classified accounts, and would, therefore, appreciate a remittance with order. No advertisement accepted for less than 50 cents.

CITRUS BUDS AND SEEDLINGS—

Usual Standard Varieties on Sour Orange Stock, also Sour Orange Seedlings. Nursery at Blanton, Pasco County. For information and prices, write R. P. Thornton or H. S. Pollard, Copthorn Nurseries, Box 2880, Tampa, Florida.

MANURE — Stable and Dairy Manure in car lots. Write for prices. P. O. Box 2022, Jacksonville, Fla.

CITRUS SEEDLINGS; Cleopatra, Sour, Sweet, Rough Lemon, Grapefruit. Grand Island Nurseries, Eustis, Fla.

CROTALARIA SPECTABILIS and Hay Peas. Write for our prices. We also have a full and complete line of all farm seeds. Robinson's Seed Warehouse, Cairo, Georgia.

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CROTALARIA SPECTABILIS — Fresh crop, \$15.00 per 100 lbs. f. o. b. Frostproof, Fla. Milton Woodley, Frostproof, Fla.

CHOICE Rough Lemon Seedlings 6 to 20 inches high, \$10.00 per thousand. Olan Altman, Sebring, Florida.

"MAIL ORDER Operator desires contact with grower of high grade avocado pears. Have interesting proposition for grower of highest quality fruit." F. R. Gardner, P. O. Box 528, Greenville, Pa.

LARGE AND SMALL orange groves for sale also acreage suited for citrus culture, dairying and general farming. Charlton & Associates, Valuation Engineers and Real Estate Appraisers, Ft. Lauderdale, Fla.

CITRUS NURSERY TREES; Standard and new varieties. Low prices for Fall planting. Grand Island Nurseries, Eustis, Fla.

Why Ship Unfit Fruit?

Fellsmere, Fla., Nov. 23, 1939
The Citrus Industry Magazine,
Bartow, Florida.
Gentlemen:

I have long been a reader of your publication and have greatly valued the many articles that have to do with the growing of fine citrus fruit. But after all, what does it profit us to grow fine fruit and advertise it in the north, when the state permits the shipment of immature fruit each year, fruit that no one of us would serve on our table? Each year the market is ruined in the fall by this practice, and does not recover when our fruit is in its prime.

I was told in Chicago this summer that due to the flooding of the market with green fruit before Christmas, our fruit that is shipped in January, February and March when at its best, has to be labeled *California* in order to sell it at any price.

I am enclosing an article in the Nov. 11th copy of the Florida Times-Union, which handles this subject better than I can. You may not have seen it.

Your publication could do a lot in stopping this practice which is not only dishonest, in my opinion, but very poor business, and will ultimately ruin the industry.

Yours very truly,

MRS. J. B. BROWER.

LONG SEASON ON TANGERINES

For what is believed to be the first time in history, Florida tangerines went to market in commercial quantities for eleven months out of the year.

Records of the state inspection bureau show shipments of 487 boxes in July and 13 boxes in August. There were none shipped in September, however. Tangerines started moving last October, when 5,536 boxes moved out of the state.

Old-time citrus men cannot recall another season extending over such a long period. Ordinarily, there are a few late bloom tangerines in May and June, but this year the May shipments amounted to 10,547 boxes and June saw 1,250 boxes go to market.



Last Call for FIRST AID to next year's crop!

TIME for that all important fall application of fertilizer on your grove is rapidly slipping by. If you have delayed this application — ask the Gulf Field Man in your section to recommend a fertilization program which will give your trees the plant foods they need to carry through the winter. It is generally agreed that the fall application is extremely important — because it builds up in the soil the reserve of plant foods which trees need to make new wood and put out a satisfactory bloom in the spring. So you're looking ahead to next year's crop when you fertilize your grove now. Use GULF Brands of complete balanced fertilizers. They're "keyed to your soil"—and are more economical in the long run.

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